In the Claims:

1. (Currently amended) A storage management service system, comprising:

a storage on demand (SoD) center system;

a storage subsystem including a plurality of storage devices, ~~devices and~~ a plurality of I/O ports, a device management table defining usability of the storage devices, an I/O port management table defining available connections between the I/O ports and the storage devices, and a SoD resource management processor capable of communicating with the SoD center system and of modifying the device management table and the I/O port management table; and

a host computer coupled to said storage subsystem and to said SoD center system, said host computer including a plurality of host I/O controllers, an I/O path setting table defining available connections between the host I/O controllers and the I/O ports, an operating system capable of modifying the I/O path setting table, and an SoD agent capable of communicating with the SoD center system and of communicating with the operating system to request modification of the I/O path setting table; wherein

said SoD center system is remote from the host computer and the storage subsystem;

each of said host I/O controllers is coupled via a different communication channel to a respective one of said I/O ports; and

said SoD center system receives input of an SoD demand, and, thereafter ~~said SoD demand including a request to specify a storage resource~~, sends information to said SoD resource management processor on ~~sends said demand to~~ said storage subsystem to manage the device management table and the I/O port management table and thereby manage the ~~manage~~ usability of the storage ~~resource~~ devices and the available connections between the I/O ports and the storage devices, and if necessary sends information to the SoD agent on the host computer to request the operating system to manage the host I/O path setting table and thereby manage available connections between the host I/O controllers and the I/O ports ~~is capable of managing accessibility of the storage resource by the host computer; and~~

~~said storage subsystem receives said demand, makes said storage resource usable, and sends a management result to the SoD center system~~.

2. (Currently amended) The system of claim 1, wherein ~~if said request includes an I/O path setting to be updated, said SoD center system sends an I/O path setting request to said host computer; and wherein~~ said host computer ~~requests an operating system to update an I/O path setting based upon said I/O path setting request, receives an update result from said operating system, and~~ sends a setting result to said SoD center system.

3. (Currently amended) The system of claim 1, wherein said host computer and said storage subsystem are coupled by physical and logical connections between at least one of the ~~a plurality of~~ host I/O controllers and at least one of the ~~a plurality of~~ subsystem I/O ports.

4. (Currently amended) The system of claim 1, wherein said host I/O controllers and said I/O ports ~~host computer and said storage subsystem~~ are coupled by a network switch ~~between at least one of a plurality of host I/O controllers and at least one of a plurality of subsystem I/O ports~~.

5. (Original) The system of claim 4, wherein said network switch comprises a fibre channel network switch.

6. (Currently amended) A storage apparatus comprising:

~~memory;~~

a plurality of storage devices;

a plurality of I/O ports providing an interface to said plurality of storage devices, each I/O port being uniquely connectable to one of a plurality of host I/O controllers on a user machine;

a device management store, in which a status of said plurality of storage devices is stored, and an I/O port management store, in which available connections between ~~a status of~~ said plurality of I/O ports and said plurality of storage devices are ~~is~~ stored; and

a storage resource management processor connectable via a network to an SoD center system, the storage resource management processor being capable of communicating with

a SoD center system and of modifying the device management store and the I/O port management store; wherein

said storage management processor receives a demand for storage resources, the demand specifying one of said storage devices, updates said device management store to manage the status ~~usability~~ of one of the storage devices and said I/O port management store to manage the available connections between ~~accessibility of~~ the one storage device and the ~~by a~~ user machine, and sends a management result responsive to said demand to the SoD center system;

updates to at least one of a plurality of paths connecting to storage resources allocated from at least one of said plurality of storage devices are ~~automatically~~ defined to an operating system of said user machine; and

said SoD center system ~~storage resource management processor~~ is remote from said plurality of storage devices and from said user machine.

7. (Previously presented) The apparatus of claim 6, said plurality of storage devices comprising at least one of a magnetic disk, an optical disk, a magnetic-optical disk, and semiconductor memory.

8. (Original) The apparatus of claim 6, further comprising a communications interface to a network, said storage management processor receiving said demand for storage resources over said network.

9. (Original) The apparatus of claim 6, further comprising a fibre channel switch, said fibre channel switch providing capability to connect to at least one of a plurality of host computers.

10. (Currently amended) A method for configuring a host to access resources in a storage subsystem, said host, said storage subsystem, and a center system being remote from each other and interconnected by a communication network, said method comprising:

receiving at said host an I/O path setting request from said center system, said I/O path setting request specifying a path to a storage resource in said storage subsystem allocated

for use by said host, said path defining a unique communication channel from one of a plurality of host I/O controllers on said host to one of a plurality of I/O ports on said storage subsystem;

requesting an operating system resident in said host to update an I/O path setting in an I/O path setting table based upon said I/O path setting request;

receiving an update result from said operating system; and

sending a setting result to said center system based upon said update result, thereby enabling the center system to manage accessibility of the storage resource by the host.

11. (Previously presented) The method of claim 10, wherein updating said I/O path setting comprises: storing an indication that a particular I/O port in said storage subsystem is accessible to a particular host I/O controller.

12. (Previously presented) The method of claim 10, further comprising:

receiving at said center system an input of a demand for storage resources;

determining whether sufficient resources exist to meet said demand;

sending said demand for storage resources to said storage subsystem, if sufficient resources were determined to exist;

receiving from said storage subsystem a management result, said management result indicating whether storage resources have been successfully allocated in accordance with said demand;

storing said management result;

determining whether said demand includes an I/O path setting request;

sending said I/O path setting request to said host, if said demand included an I/O path setting request;

receiving said setting result from said host; and

storing said setting result.

13. (Previously presented) The method of claim 12, further comprising:

receiving said demand for storage resources at said storage subsystem;

determining whether said demand includes a command to make at least one of a plurality of installed devices available;

updating a device management store, if said demand includes a command to make at least one of a plurality of installed devices available;

updating an I/O port management store; and

sending a resource management result to said center system.

14. (Previously presented) The method of claim 13, wherein updating a device management store comprises: storing an indication that a particular device is usable.

15. (Previously presented) The method of claim 13, wherein updating a I/O port management store comprises: storing an indication that a particular I/O port is usable.

16. (Previously presented) The method of claim 13, further comprising:

receiving at said storage subsystem an I/O command to access storage resources from said host;

determining whether storage resources requested by said I/O command are usable;

performing said I/O command, if said storage resources requested by said I/O command are usable, otherwise rejecting said I/O command; and

sending an I/O result to said host.

17. (Previously presented) The method of claim 16, wherein determining whether storage resources requested by said I/O command are usable comprises:

searching said device management store to determine whether devices requested in said I/O command are usable.

18. (Previously presented) The method of claim 17, wherein determining whether storage resources requested by said I/O command are usable further comprises:

searching said I/O port management store to determine whether I/O ports requested in said I/O command are usable and whether devices requested in said I/O command are accessible via I/O ports requested in said I/O command.

19. (Currently amended) A computer program product for configuring a host to access resources in a storage subsystem, said host, said storage subsystem, and a center system being remote from each other and interconnected by a communication network, said computer program product comprising:

code that receives at said host an I/O path setting request from said center system, said I/O path setting request specifying a path to a storage resource in said storage subsystem allocated for use by said host, said path defining a unique communication channel from one of a plurality of host I/O controllers on said host to one of a plurality of I/O ports on said storage subsystem;

code that requests an operating system resident in said host to update an I/O path setting in an I/O path setting table based upon said I/O path setting request;

code that receives an update result from said operating system;

code that sends a setting result to said center system based upon said update result, the codes thereby enabling the center system to manage accessibility of the storage resource by the host; and

a computer readable storage medium for holding the codes.

20. (Previously presented) The computer program product of claim 19, further comprising:

code that receives at said center system an input of a demand for storage resources;

code that determines whether sufficient resources exist to meet said demand;

code that sends said demand for storage resources to said storage subsystem, if sufficient resources are determined to exist;

code that receives from said storage subsystem a management result, said management result indicating whether storage resources have been successfully allocated in accordance with said demand;

code that stores said management result;

code that determines whether said demand includes an I/O path setting request;

code that sends said I/O path setting request to said host, if said demand includes an I/O path setting request;

code that receives said setting result from said host; and

code that stores said setting result.

21-26. (Canceled)